METHOD AND SYSTEM FOR FINDING MATCH
IN DATABASE RELATED TO WAVEFORMS

ABSTRACT OF THE DISCLOSURE

To determine whether there is a record in a database corresponding to a file containing

5   a waveform, one or more segments of a digitally sampled waveform are used to form an

amplitude signature of the waveform. The amplitude signature is generated by counting the

number of occurrences within the segment(s) of the waveform in each of a plurality of

amplitude bands or slots. The amplitude signature of the waveform undergoes a fuzzy

comparison with amplitude signatures in the database. If more than one potential match is

10   found, a more precise comparison is made. This technique can be used with compact discs

(CDs) by taking, e.g., five second sample segments from the beginning, middle and end of

each track to detect the amplitude of the waveform in each of 558 samples in the 1/75 second

frames recorded in the sample segments of the CD. A CD amplitude signature may be formed

of approximately 2000 amplitude bands or slots from the lowest amplitude to the highest

15   amplitude of the waveform by accumulating the occurrence of signals within each amplitude

slot for all of the sample segments of the CD. The amplitude signature can be used to

distinguish between multiple potential matches obtained based on table of contents (TOC) data

for the CD indicating the number of tracks and the length of each.